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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/663,574 | 09/16/2003 | Gabriel G. Marcu | 2095.000900/P3112 | 5291 |

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| EXAMINER |
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RATCLIFFE, LUKE D

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| ART UNIT | PAPER NUMBER |
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3662

| SHORTENED STATUTORY PERIOD OF RESPONSE | MAIL DATE | DELIVERY MODE |
|--|------------|---------------|
| 3 MONTHS | 01/04/2007 | PAPER |

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

| | | | |
|------------------------------|------------------------|---------------------|--|
| Office Action Summary | Application No. | Applicant(s) | |
| | 10/663,574 | MARCU, GABRIEL G. | |
| | Examiner | Art Unit | |
| | Luke D. Ratcliffe | 3662 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 9/14/06.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-45 is/are pending in the application.
- 4a) Of the above claim(s) 9, 14-17, 24, 25 and 31-34 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8, 10-13, 18-23, 26-30 and 35-45 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 16 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

The advisory action dated 1/30/06 has been withdrawn and the time period has been reset. This office action will examine the claims that were submitted with the after final amendment dated 9/14/06.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims **1-5, 8, 26, and 27** are rejected under 35 U.S.C. 102(b) as being anticipated by Bachmann (4764010).

Referring to claims **1, 8, 26, and 27**, Bachmann shows an apparatus and a method of sending an optical signal from a first apparatus to a second apparatus based upon an incident angle (figure 3 and columns 1 and 2 and column 5 lines 5-20), a means for receiving a reflection of the optical signal from the second apparatus on a screen (column 4 line 30-50), and a means for adjusting a position of on apparatus relative to the other apparatus by adjusting the incident angle based upon the reflection (figure 3 and columns 1-3).

Referring to **claim 2**, Bachmann shows an optical source on the first apparatus (figure 3).

Referring to **claim 3**, Bachmann shows a method of directing the light a predetermined incident angle (column 5 line 5-20).

Referring to **claim 4**, Bachmann shows a second apparatus with a reflective material affixed upon it (figure 3).

Referring to **claim 5**, Bachmann shows a method for adjusting said incident angle (column 5 lines 5-20).

Referring to **claim 35**, Bachmann shows a first device that is a testing device (column 1 line 5-10).

Claims 10-13 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bachmann (4764010) in view of Holzl (5026998).

Referring to claim 10, Bachmann shows an apparatus and a method of sending an optical signal from a first apparatus to a second apparatus based upon an incident angle (figure 3 and columns 1 and 2 and column 5 lines 5-20), a means for receiving a reflection of the optical signal from the second apparatus on a screen (column 4 line 30-50), and a means for adjusting a position of on apparatus relative to the other apparatus by adjusting the incident angle based upon the reflection (figure 3 and columns 1-3). However Bachmann shows a screen that does not have a circuit to detect a position of the reflected light.

Holzl shows a screen that does have a circuit to detect a position of the reflected light (figure 1 Ref 7). It would have been obvious to modify Bachmann to include the circuit in Holzl because this allows the alignment process to be more automated with the use of electronics.

Referring to **claim 11**, Bachman shows a light receiving unit that comprises a screen (figure 3).

Referring to **claim 12**, Holzl shows a screen with a plurality of markings to provide a location on said screen upon which the reflective light is received (figures 1 and 2).

Referring to **claim 13**, Holzl shows a means for providing a signal that is indicative of said location on said screen upon which the reflected light is received (figure 1 Ref 7).

Referring to **claims 18**, Bachman shows a first apparatus that is a testing device (column 1 line 5-10).

Referring to **claims 22 and 23**, Bachmann shows a mirror affixed upon a second apparatus for providing the reflective light (figure 3).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bachmann (4764010) in view of Holzl (5026998) as applied to claim 18 above, and further in view of Stabile (5872623).

Stabile shows a photometer and a radiometer (figure 1B Ref 205). It would have been obvious to further modify Walker to include the photometer and radiometer because radiant energy in the form of light needs to be measured to determine if the correct correlation between the first and second apparatuses is achieved.

Claims 20, 21, 38-41, 44, and 45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bachmann (4764010) in view of Holzl (5026998) and Dänkliker (4225241).

Referring to **claims 20, 21, 38, 39, and 44**, Dänkliker shows a second apparatus as a LCD screen that is well known that can be a computer screen (column 1 lines 34-44). It would have been obvious to modify Bachmann to use a computer screen that is an LCD screen for the second apparatus because this device will measure the visual effects of changing the angle of incidence.

Referring to **claim 40**, Bachmann shows an apparatus and a method of sending an optical signal from a first apparatus to a second apparatus based upon an incident angle (figure 3 and columns 1 and 2 and column 5 lines 5-20), a means for receiving a reflection of the optical signal from the second apparatus on a screen (column 4 line 30-50), and a means for adjusting a position of on apparatus relative to the other apparatus by adjusting the incident angle based upon the reflection (figure 3 and columns 1-3).

Dänkliker shows a second apparatus as a LCD screen that is well known that can be a computer screen (column 1 lines 34-44). It would have been obvious to modify Bachmann to use a computer screen that is an LCD screen for the second

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apparatus because this device will measure the visual effects of changing the angle of incidence.

Referring to **claim 41**, Bachman shows a screen to receive the reflective light (figure 3).

Referring to **claim 45**, Bachmann shows a reflective material affixed upon the second apparatus which if modified by Dankliker would be a computer display.

Claims 28-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bachmann (4764010) in view of Snyder (4480912).

Referring to **claim 28**, Bachmann shows an apparatus and a method of sending an optical signal from a first apparatus to a second apparatus based upon an incident angle (figure 3 and columns 1 and 2 and column 5 lines 5-20), a means for receiving a reflection of the optical signal from the second apparatus on a screen (column 4 line 30-50), and a means for adjusting a position of on apparatus relative to the other apparatus by adjusting the incident angle based upon the reflection (figure 3 and columns 1-3). However Bachmann does not show a plurality of marks on the screen.

Snyder shows a screen with a plurality of marks on the screen. It would be obvious that on the screen there would be a plurality of markings where the light is received to help with the alignment of the two objects.

Referring to **claim 29**, Bachmann shows a means for providing a light signal that is indicative of the location of the screen upon which the reflective light is received.

Referring to **claim 30**, Bachmann shows a reflective material affixed upon said second device (figure 3).

Claim 36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bachmann (6154522) in view of Stabile (5872623).

Referring to **claim 36**, Stabile shows a photometer and a radiometer (figure 1B Ref 205). It would have been obvious to further modify Bachmann to include the photometer and radiometer because radiant energy in the form of light needs to be measured to determine if the correct correlation between the first and second apparatuses is achieved.

Claim 42 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bachmann (4764010) in view of Holzl (5026998) and Dänkliker (4225241) and Snyder (4480912).

Bachmann shows an apparatus and a method of sending an optical signal from a first apparatus to a second apparatus based upon an incident angle (figure 3 and columns 1 and 2 and column 5 lines 5-20), a means for receiving a reflection of the optical signal from the second apparatus on a screen (column 4 line 30-50), and a means for adjusting a position of on apparatus relative to the other apparatus by adjusting the incident angle based upon the reflection (figure 3 and columns 1-3). However Bachmann does not show a plurality of marks on the screen.

Snyder shows a screen with a plurality of marks on the screen. It would be obvious that on the screen there would be a plurality of markings where the light is received to help with the alignment of the two objects.

Claim 43 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bachmann (4764010) in view of Holzl (5026998) and Dänkliker (4225241) and Stabile (5872623).

Stabile shows a photometer and a radiometer (figure 1B Ref 205). It would have been obvious to further modify Walker to include the photometer and radiometer because radiant energy in the form of light needs to be measured to determine if the correct correlation between the first and second apparatuses is achieved.

Response to Arguments

The arguments of the applicant filed via a phone interview have been found to be persuasive, the examiner made an erroneous advisory action and is now sending a new final rejection and resetting the date for the applicants response to three months. This rejection is the same as the previous advisory action.

Applicant's arguments filed 9/14/06 have been fully considered but they are not persuasive. Bachmann shows sending an optical signal from a first apparatus to a second apparatus based upon an incident angle (column 1 line 44 - 65 and column 5 line 5-20), incident being falling or striking something, as pertaining to light rays, any angle at which the optical signal from the first apparatus to the second apparatus would be incident. Bachmann also shows using a screen that receives a reflected angle of the optical signal from the second apparatus (column 4 line 32-65). Bechmann also shows

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adjusting a position of one of the apparatuses relative to the other, IN ANY WAY, by adjusting the incident angle, incident being falling or striking something, as pertaining to light rays, any angle at which the optical signal from the first apparatus to the second apparatus would be incident. Therefor since Bechmann does show each and every feature claimed the rejection stands.

Holzl shows "Thus in every position of measurement of the two shafts 1 and 2 the position detector produces two signals $S_{\text{sub}.x}$ and $S_{\text{sub}.y}$, which correspond to the coordinates x and y of the point A of incidence of the light beam on the position detector 7 with respect to a reference point BP fixed in relation to the shaft" (column 4 lines 21-28). Holzl is referring to something call the Cartesian coordinate system when he says $S_{\text{sub}.x}$ and $S_{\text{sub}.y}$ which is used in general to describe a POSITION with respect to a origin =reference point BP". Therefor Holzl shows a screen that produces two electrical signals that determine where the light strikes the screen, and since electrical signals do include some type of circuitry, excluding natural electrical signals, the circuitry is inherent. Furthermore it would be obvious to combine the screen that outputs the position of the light to automate the process taught by Bachmann.

Holzl shows the use of a photometer as described above, Stabile shows both a photometer and a radiometer which would be obvious to use because they detect light which is what Bachmann shows is the main factor in the alignment method disclosed.

Dandliker shows adjusting a relative positioning of a computer LCD screen and Bachmann shows adjusting the relative positioning of a first and second apparatus. These are similar art because they include the alignment and relative positioning of their

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respective apparatus using a transmitted light. It would further be obvious to position any apparatus using the methods disclosed by Bachmann because the method of transmitting a signal and receiving a reflected signal on a screen is not apparatus dependent.

Snyder shows markings on the screen as shown in figure 11 and these markings are also taught by the aperture discussed in Bachmann. The art is analogous because they both deal with angular alignment.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Luke D. Ratcliffe whose telephone number is 571-272-3110. The examiner can normally be reached on 8:00-4:30 M-F.


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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas Tarcza can be reached on 571-272-6979. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

LDR

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